

**APPENDIX A—EFFLUENT TRADING IN WATERSHEDS
POLICY STATEMENT**

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Purpose

In response to President Clinton's *Reinventing Environmental Regulation* (March 1995), EPA strongly promotes the use of effluent trading to achieve water quality objectives and standards. This statement communicates EPA's policy on effluent trading in watersheds, discusses the benefits of trading, presents an explanation of several types of effluent trading, and outlines how EPA will be encouraging trading. This policy is Agency guidance only and does not establish or affect legal rights or obligations. It does not establish a binding norm and is not finally determinative of the issues addressed. Agency decisions in any particular case will be made by applying the law and regulations on the basis of specific facts when permits are issued.

Policy

EPA will actively support and promote effluent trading within watersheds to achieve water quality objectives, including water quality standards, to the extent authorized by the Clean Water Act and implementing regulations. EPA will work cooperatively with key stakeholders to find sensible, innovative ways to meet water quality standards quicker and at less overall cost than with traditional approaches alone. EPA will assure that effluent trades are implemented responsibly so that environmental progress is enhanced, not hindered.

Benefits

EPA's support of watershed-based trading is anchored to a strong commitment to achieve and maintain water quality standards. EPA believes that trading is an innovative way for community stakeholders (e.g., regulated sources, non-regulated sources, regulatory agencies and the public) to develop more "common sense" solutions to water quality problems in their watersheds. Effluent trading potentially offers a number of economic, environmental and social benefits:

Economic Benefits:

- Reduces costs for individual sources contributing to water quality problems.
- Allows dischargers to take advantage of economies of scale and treatment efficiencies that vary from source to source.
- Reduces overall cost of addressing water quality problems in the watershed.

Environmental Benefits:

- Achieves equal or greater reduction of pollution for the same or less cost.
- Creates an economic incentive for dischargers to go beyond minimum pollution reduction and also encourages pollution prevention and the use of innovative technologies.
- Can reduce cumulative pollutant loading, improve water quality, accommodate growth and prevent future environmental degradation.
- Can address the broader environmental goals within a trading area, e.g., ecosystem protection, ecological restoration, improved wildlife habitat, endangered species protection, etc.

Social Benefits:

- Encourages dialogue among stakeholders and fosters concerted and holistic solutions for watersheds with multiple sources of water quality impairment.

Explanation of Different Types of Effluent Trading

Trading supplements the current regulatory approach. It is a method to attain and/or maintain water quality standards, by allowing sources of pollution to achieve pollutant reductions through substituting a cost-effective and enforceable mix of controls on other sources of discharge. As the Agency improves its understanding of the opportunities afforded by watershed-based decision making, EPA will provide information for additional forms of trading.

To take advantage of trading, a point source must be in compliance, and remain in compliance, with applicable technology-based limits. Intra-plant trades must also have a technology-based floor, while the technology floor for pretreatment trading is determined by the categorical standards. EPA expects that most trades will be covered by Total Maximum Daily Loads (TMDL) or similar watershed-based analysis.¹

The items to be traded are the pollutant reductions or water quality improvements sought. Under trading, a source that can more cost-effectively achieve greater pollutant reduction than is otherwise required would be able to sell or barter the credits for its excess reduction to another source unable to reduce its own pollutants as cheaply. To ensure that water quality standards are

¹ A TMDL provides the water quality analysis and planning process for determining the specific pollution reductions that are necessary to attain or maintain water quality standards. Under section 303 (d) of the CWA, States establish TMDLs for impaired waters. The TMDL process includes legal requirements for public participation and implementation through NPDES permits.

met throughout a watershed, an equivalent or better water pollutant reduction would need to result from a trade. Below are proposed definitions for several different types of effluent trading approaches. These definitions are preliminary and do not reflect the full range of feasible trades:

Intra-Plant Trading: A point source is allocated pollutant discharges among its outfalls in a cost-effective manner, provided that the combined permitted discharge with trading is no greater than the combined permitted discharge without trading in the watershed.

Pretreatment Trading: An indirect industrial point source(s) that discharges to a publicly owned treatment works arranges, through the local control authority, for additional control by other indirect point sources beyond the minimum requirements in lieu of upgrading its own treatment for an equivalent level of reduction.

Point/Point Source Trading: A point source(s) arranges for other point source(s) in a watershed to undertake greater than required control in lieu of upgrading its own treatment beyond the minimum technology-based treatment requirements in order to more cost-effectively achieve water quality standards.

Point/Nonpoint Source Trading: A point source(s) arranges for control of nonpoint source discharge(s) in a watershed in lieu of upgrading its own treatment beyond the minimum technology-based treatment requirements in order to more cost-effectively achieve water quality standards.

Nonpoint/Nonpoint Source Trading: A nonpoint source(s) arranges for more cost-effective control of other nonpoint sources in a watershed in lieu of installing or upgrading its own control.

How EPA Will Be Encouraging Trading

EPA is developing a framework for watershed-based effluent trading, as well as information exchange workshops, and limited technical assistance for trading projects in specific areas. Watershed-based trading will be implemented on a voluntary basis under existing Clean Water Act (CWA) authorities. There will be substantial public outreach effort to obtain

stakeholders' recommendations and insights on draft portions of the framework prior to implementation.

Finally, while EPA believes that the potential of trading is largely untapped, the usefulness of trading will depend on the site-specific water quality conditions in any given situation. The framework will describe situations which EPA believes are most appropriate for watershed-based trading, and those that are generally inappropriate.

EPA plans to distribute a draft trading framework in February, 1996 and hold a series of stakeholder meetings. For more information call Mahesh Podar at (202)260-7818, fax (202)401-3372 or send an Email message to herzi.hawa@epamail.epa.gov or tuano.theresa@epamail.epa.gov.

Attachment

s/

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Attachment

EXPERIENCE TO DATE

Trading is being explored, developed or implemented in a number of watersheds throughout the country. Some examples are below:

Project/Location	Focus	Type of Trading
Fox River, WI	BOD, nutrients	point/point
Dillon Reservoir, CO	phosphorus	point/nonpoint; nonpoint/nonpoint
Boulder Creek, CO	ammonia, nutrients	point/nonpoint
Tar-Pamlico, NC	nitrogen, phosphorus	point/nonpoint
Arkansas Nature Conservancy	wetlands	nonpoint/nonpoint
Maryland Nontidal Wetlands	wetlands	nonpoint/nonpoint
Iron and Steel	BOD, TSS, zinc, and lead	intra-plant
Rhode Island electroplaters	metals	pretreatment
Chehalis River Basin, WA	BOD	point/nonpoint
Boone Reservoir, TN	nutrients	point/nonpoint
Wicomico River, MD	phosphorus	point/nonpoint
Honey Creek Watershed, OH	phosphorus	point/nonpoint
South San Francisco Bay, CA	copper	point/point
Long Island Sound, NY	dissolved oxygen	Point/nonpoint
Cherry Creek, CO	phosphorus	point/nonpoint; point/point
Tampa Bay, FL	nitrogen, TSS	point/point; point/nonpoint; nonpoint/nonpoint
Chatfield Basin, CO	phosphorus	point/nonpoint